Microsoft Excel - Charts

Charts: Types and Characteristics

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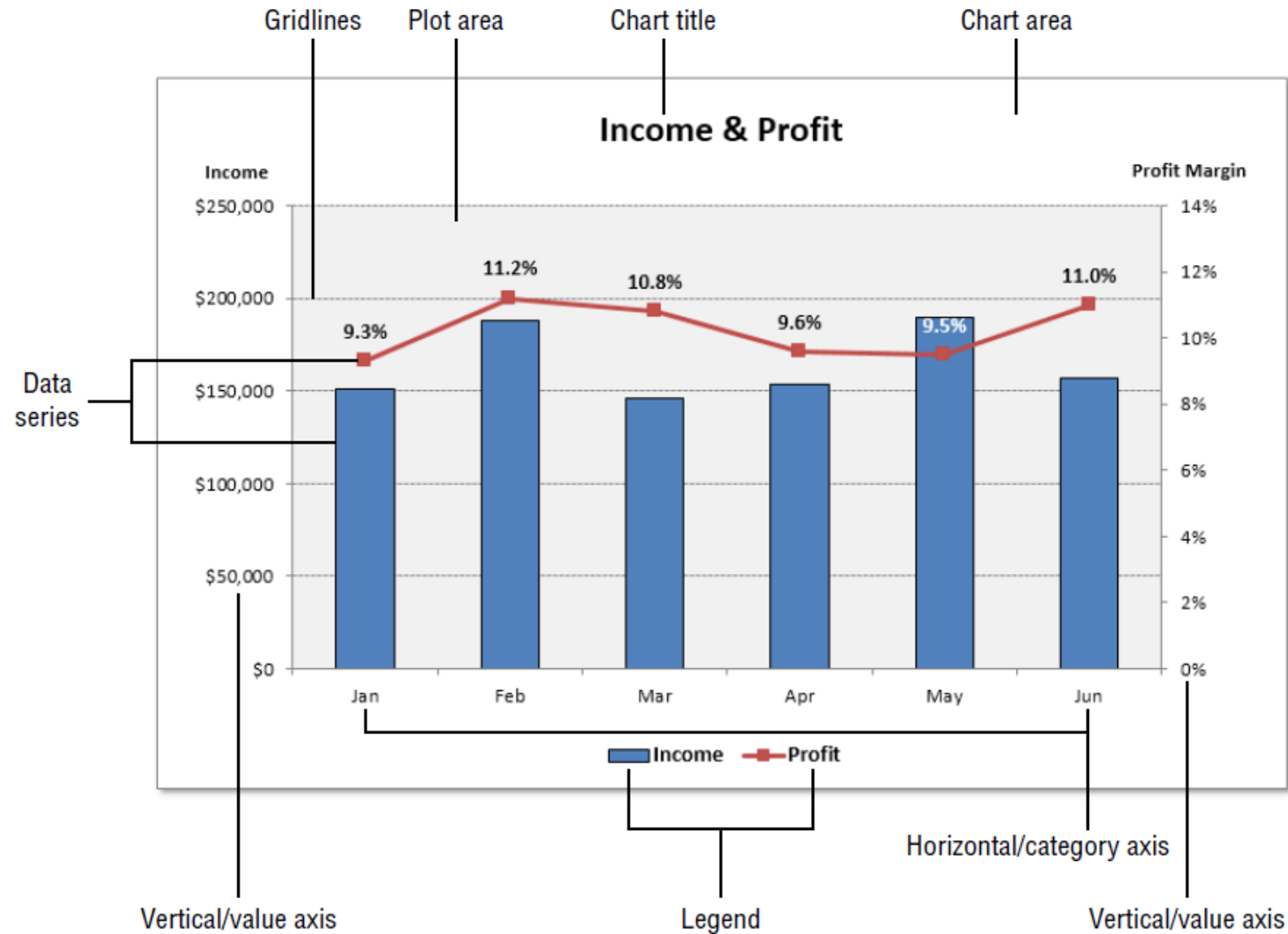School of Economics and Finance

What is a Chart?

- A **chart** or a **graph** is a visual representation of numeric values.

- Advantages of using charts:
  - ease understanding of large quantities of data;
  - ease understanding relationships between parts of the data;
  - more effective, clear and easy to read than the raw data.

- Excel has several types of charts, allowing you to choose the one that best fits your data.

- To use charts effectively, it is extremely important to choose the correct graph for your types of data.

Chart Types

Chart Type	Description
Column	Compares values from different categories. Values are indicated by the height of the columns.
Line	Compares values from different categories. Values are indicated by the height of the line. Often used to show trends and changes over time.
Pie	Compares relative values of different categories to the whole. Values are indicated by the areas of the pie slices.
Bar	Compares values from different categories. Values are indicated by the length of the bars.
Area	Compares values from different categories. Similar to the line chart except that areas under the lines contain a fill color.
XY (Scatter)	Shows the patterns or relationship between two or more sets of values. Often used in scientific studies and statistical analyses.
Stock	Displays stock market data, including the high, low, opening, and closing prices of a stock.
Surface	Compares three sets of values in a three-dimensional chart.
Doughnut	Compares relative values of different categories to the whole. Similar to the pie chart except that it can display multiple sets of data.
Bubble	Shows the patterns or relationship between two or more sets of values. Similar to the XY (Scatter) chart except the size of the data marker is determined by a third value.
Radar	Compares a collection of values from several different data sets.

Parts of a Chart

Gridlines Plot area Chart title Chart area

Income & Profit

Income

Profit Margin

$250,000 — 14%

11.2%   11.0%
10.8%
9.3%   9.6%   9.5%

$200,000 — 12%

Data series

$150,000 — 8%

$100,000 — 6%

$50,000

$0 — 0%

Jan Feb Mar Apr May Jun

Income Profit

Vertical/value axis   Legend   Vertical/value axis

Horizontal/category axis

Creating a Chart in Excel

General steps to create a chart:

- Select the data you want to use in the chart;

- Click the Insert tab and then click a Chart icon in the Charts group;

- Click a Chart subtype, and Excel then creates the chart of the specified type.

Graph can also be modified:

- Different orientation, chart type, adding and deleting chart elements, formatting chart elements, moving and resizing a chart

Remember: the size of the graph is extremely important for presenting the data in a clear and precise way.